



Applicant or Patentee: Roy Curtiss, III, and Steven A. Tinge

Attorney's  
Docket No.:  
MEGAN100

Serial or Patent No.: 08/473,789

Filed or Issued: June 7, 1995

For: RECOMBINANT BACTERIAL VACCINE SYSTEM  
WITH ENVIRONMENTALLY LIMITED VIABILITY

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS  
(37 CFR 1.9(f) and 1.27(d)) - NONPROFIT ORGANIZATION

I hereby declare that I am an official empowered to act on  
behalf of the nonprofit organization identified below:

NAME OF ORGANIZATION: Washington University

ADDRESS OF ORGANIZATION: One Brookings Drive  
St. Louis, Missouri 63130

TYPE OF ORGANIZATION

- ☒ UNIVERSITY OR OTHER INSTITUTION OF HIGHER EDUCATION
- ☐ TAX EXEMPT UNDER INTERNAL REVENUE SERVICE CODE  
(26 USC 501(a) and 501(c)(3))
- ☐ NONPROFIT SCIENTIFIC OR EDUCATIONAL UNDER STATUTE  
OF STATE OF THE UNITED STATES OF AMERICA
- ☐ WOULD QUALIFY AS TAX EXEMPT UNDER INTERNAL REVENUE  
SERVICE CODE (26 USC 501(a) and 501(c)(3) IF LOCATED  
IN THE UNITED STATES OF AMERICA
- ☐ WOULD QUALIFY AS NONPROFIT SCIENTIFIC OR EDUCATIONAL  
UNDER STATUTE OF STATE OF THE UNITED STATES OF AMERICA  
IF LOCATED IN THE UNITED STATES OF AMERICA

I hereby declare that the nonprofit organization identified  
above qualifies as a nonprofit organization as defined in 37 CFR  
1.9(e) for purposes of paying reduced fees under section 41(a)  
and (b) of Title 35, United States Code with regard to the  
invention entitled "Recombinant Bacterial Vaccine System with

"Recombinant Bacterial Vaccine System  
with Environmentally Limited Viability"  
By: Roy Curtiss, III, and Steven A. Tinge  
Filed: June 7, 1995  
VERIFIED STATEMENT CLAIMING SMALL ENTITY STATUS

Environmentally Limited Viability" by Roy Curtiss, III, and  
Steven A. Tinge described in

☐ the specification filed herewith

☒ application serial no. 08/473,789 , filed June 7, 1995

☐ patent no. \_\_\_\_\_ issued \_\_\_\_\_

I hereby declare that rights under contract or law have been  
conveyed to and remain with the nonprofit organization with  
regard to the above-identified invention.

If the rights held by the nonprofit organization are not  
exclusive, each individual, concern or organization having rights  
to the invention is listed below\* and no rights to the invention  
are held by any person, other than the inventor, who could not  
qualify as an independent inventor under 37 CFR 1.9(c) or by any  
concern which would not qualify as a small business concern under  
37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

**\*NOTE:** Separate verified statements are required from each named  
person, concern or organization having rights to the invention  
averring to their status as small entities. (37 CFR 1.27)

NAME: Megan Animal Health, Inc.

ADDRESS: 3655 Vista Avenue, St. Louis, Missouri 63110

☐ INDIVIDUAL ☒ SMALL BUSINESS CONCERN ☐ NONPROFIT ORG.

I acknowledge the duty to file, in this application or  
patent, notification of any change in status resulting in loss of

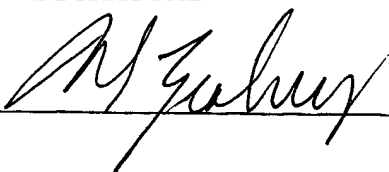
"Recombinant Bacterial Vaccine System  
with Environmentally Limited Viability"  
By: Roy Curtiss, III, and Steven A. Tinge  
Filed: June 7, 1995  
VERIFIED STATEMENT CLAIMING SMALL ENTITY STATUS

entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING: H.S. Leahey  
TITLE IN ORGANIZATION: Director, Technology Management  
ADDRESS OF PERSON SIGNING: One Brookings Drive, Campus Box 1045  
St. Louis, Missouri 63130

SIGNATURE



DATE

8/1/95

**DECLARATION FOR PATENT APPLICATION**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below), or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**Recombinant Bacterial Vaccine System with Environmentally Limited Viability**

the specification of which (check one)

\_\_\_\_\_ is attached hereto  
 \_\_\_\_\_ was filed on \_\_\_\_\_  
 as application Serial No. \_\_\_\_\_  
 \_\_\_\_\_ and was amended on: \_\_\_\_\_  
 (if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)	<u>Priority Claimed</u>
<div style="display: flex; justify-content: space-between;"> <div>_____ (Number)</div> <div>_____ (Country)</div> <div>_____ (Day/Month/Year Filed)</div> </div>	_____
<div style="display: flex; justify-content: space-between;"> <div>_____ (Number)</div> <div>_____ (Country)</div> <div>_____ (Day/Month/Year Filed)</div> </div>	_____
<div style="display: flex; justify-content: space-between;"> <div>_____ (Number)</div> <div>_____ (Country)</div> <div>_____ (Day/Month/Year Filed)</div> </div>	_____

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of the application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

_____ (Application Serial No.)	_____ (Filing Date)	_____ Status (patented, pending, abandoned)
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"Recombinant Bacterial Vaccine System with Environmentally Limited Viability" Express Mail Label Number TB046533641US  
By: Roy Curtiss, III and Steven A. Tinge  
Filed: June 7, 1995  
DECLARATION

(Application Serial No.)

(Filing Date)

Status  
(patented, pending, abandoned)

As named inventor, I hereby appoint the following attorney(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Patrea L. Pabst	31,284
Madeline I. Johnston	36,174
Robert A. Millman	36,217

Send Correspondence to:

Patrea L. Pabst, Esq.  
ARNALL GOLDEN & GREGORY  
2800 One Atlantic Center  
1201 W. Peachtree Street  
Atlanta, GA 30309-3450

Direct telephone calls to:

Patrea L. Pabst (404)873-8794

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor Roy Curtiss, III

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence 6065 Lindell Blvd, St. Louis, MO. 63112-1009

Citizenship United States

Post Office Address \_\_\_\_\_

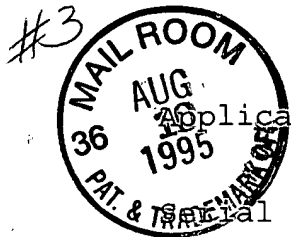
Full name of second joint inventor (if any) Steven A. Tinge

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence 52 Lindenleaf Lane, Belleville, IL 62223

Citizenship United States

Post Office Address \_\_\_\_\_



JUL 03 1995

Applicant or Patentee: Roy Curtiss, III, and Steven A.

Tinge

Attorney's  
Docket No.:  
MEGAN100

Serial or Patent No.: 08/473,789

Filed or Issued: June 7, 1995

For: RECOMBINANT BACTERIAL VACCINE SYSTEM  
WITH ENVIRONMENTALLY LIMITED VIABILITY

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS  
(37 CFR 1.9(f) and 1.27(c)) - SMALL BUSINESS CONCERN

I hereby declare that I am

[ ] the owner of the small business concern identified  
below:

[X] an official of the small business concern empowered to  
act on behalf of the concern identified below:

Megan Animal Health, Inc.  
3655 Vista Avenue  
St. Louis, Missouri 63110

I hereby declare that the above identified small business concern qualifies as a small business concern as defined in 13 CFR 121.3-18, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention, entitled "Recombinant Bacterial Vaccine System with Environmentally Limited Viability" by Roy Curtiss, III, and Steven A. Tinge described in

[ ] the specification filed herewith  
[X] application serial no. 08/473,789, filed June 7, 1995  
[ ] patent no. , issued

"Recombinant Bacterial Vaccine System  
with Environmentally Limited Viability"  
By: Roy Curtiss, III, and Steven A. Tinge  
Filed: June 7, 1995

VERIFIED STATEMENT CLAIMING SMALL ENTITY STATUS

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights to the invention is listed below\* and no rights to the invention are held by any person, other than the inventor, who could not qualify as an independent inventor concern under 37 CFR 1.9(c) or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e). \*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

NAME Washington University  
ADDRESS One Brookings Drive, St. Louis, Missouri 63130  
☐ INDIVIDUAL ☐ SMALL BUSINESS ☒ NONPROFIT

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING:

Brian L. Clevinger Brian L. Clevinger

TITLE OF PERSON OTHER THAN OWNER

President

ADDRESS OF PERSON SIGNING

40 N. Kingshighway 14T  
St. Louis, MO 63108

Brian L. Clevinger  
SIGNATURE

6/28/95  
DATE

#3



# DECLARATION FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below), or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

## **Recombinant Bacterial Vaccine System with Environmentally Limited Viability**

the specification of which (check one)

\_\_\_\_\_ is attached hereto

  x   was filed on June 7, 1995  
as application Serial No. 08/473,789

\_\_\_\_\_ and was amended on: \_\_\_\_\_  
(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)			<u>Priority Claimed</u>
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	_____
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	_____
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	_____

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of the application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

_____ (Application Serial No.)	_____ (Filing Date)	_____ Status (patented, pending, abandoned)
--------------------------------	---------------------	--



"Recombinant Bacterial Vaccine System with Environmentally Limited Viability"

By: Roy Curtiss, III and Steven A. Tinge

Filed: June 7, 1995

DECLARATION

As named inventor, I hereby appoint the following attorney(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

(3)

Patrea L. Pabst	<u>31,284</u>
Madeline I. Johnston	<u>36,174</u>
Robert A. Millman	<u>36,217</u>

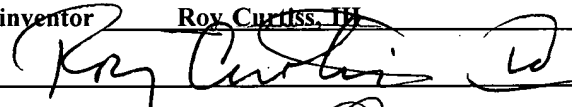
Send Correspondence to:

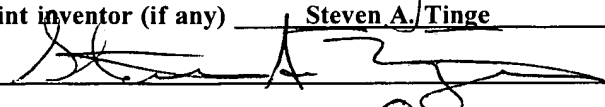
Patrea L. Pabst, Esq.  
ARNALL GOLDEN & GREGORY  
2800 One Atlantic Center  
1201 W. Peachtree Street  
Atlanta, GA 30309-3450

Direct telephone calls to:

Patrea L. Pabst (404)873-8794

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

1-00 Full name of sole or first inventor Roy Curtiss, III  
Inventor's signature  Date 7-6-95  
Residence 6065 Lindell Blvd, St. Louis, MO 63112-1009  
Citizenship United States  
Post Office Address \_\_\_\_\_

2-00 Full name of second joint inventor (if any) Steven A. Tinge  
Inventor's signature  Date 7-10-95  
Residence 52 Lindenleaf Lane, Belleville, IL 62223  
Citizenship United States  
Post Office Address \_\_\_\_\_

#3

CERTIFICATE UNDER 37 CFR 3.73

Applicants: Roy Curtiss, III, and Steven A. Tinge

Application No.: 08/473,789

Filed: June 7, 1995

For: RECOMBINANT BACTERIAL VACCINE SYSTEM WITH ENVIRONMENTALLY LIMITED VIABILITY

Washington University  
(Name of Assignee)

a corporation/university  
(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of either:

A. ☒ An assignment from the inventor of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:

1. From:

To:

The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

3. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplement sheet.

☐ Copies of assignments or other documents in the chain of title are attached.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and believe are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date : July 24, 1995

Name : H.S. Leahey

Title : Director, Technology Management

Signature : 